

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL

2200 Churchill Road
Springfield, Illinois 62706
(217) 782-6760

APPLICATION FOR A PERMIT

For Agency Use

FOR WELL INJECTION

Received:

FORM C - SUPPLEMENTAL PERMIT

Reviewed:

Reviewer:

S.P. Issued:

S.P. No.:

The applicant shall obtain a Supplemental Permit from the Agency if any alteration or modification of any part of the well injection facility is planned during construction or operation periods, or any change is planned in waste quality or quantity, the operation or monitoring program, or in permit conditions. A Supplemental Permit can be requested by an applicant who has a valid Construction or Operation Permit for a well injection facility.

1. Name of applicant: Cabot Corporation
2. Telephone: 217-253-3370
3. Mailing address: P. O. Box 188, Tuscola, IL 61953
4. Construction or Operation Permit No: 1975-EB-1316-OP
5. Application date: June 28, 1977
6. Explain the purpose of the Supplemental Permit request, attach a copy of text and data, if necessary:

The purpose of this Supplemental Permit Application is to request authorization to dispose of increased quantities of waste from the A. E. Staley Manufacturing Co. Details of the waste are presented in the attached sheets.

7. Signature of applicant: *J. L. Hobbie/MS*

Title: Division Manufacturing Manager

Date:

8. Signature of consulting engineer (if needed):

P.E. No.:

Date:

Address:

EPA Region 5 Records Ctr.



298906

Information Pertaining to A. E. Staley Waste

Waste Generator

A. E. Staley Manufacturing Co.
2200 Eldorado Street
Decatur, Illinois 62525
Telephone: 217-423-4411

Waste Hauler

Buck Trucking Co., Inc.
4083 Faries Parkway
Decatur, Illinois 62526
Telephone: 217-422-1172

Chemical Analysis

See attached sheet

Source of Waste

The wastes consist of several starch filtrates.

Volume of Waste:

Up to 1,900,000 gallons per month.

Volume Increase of Waste to be Injected, gpm

There would be no increase in the instantaneous maximum flow rate to the well. Our present operation is an on-off situation resulting from changes in settling pond level. This pond is on level control. At high pond levels, the control valve to the well is fully open and the maximum flow rate is obtained. At low pond levels, the valve is fully closed. Therefore, rather than determining an increase in the injection rate, we should consider the extra time period that the well will be operating. Assuming a maximum Staley disposal of 60,000 gallons per day and a normal plant injection rate of 270 gpm, this requires additional well operating time of less than four hours. When adding this to our present disposal, we would have up to 18 hours per day of well operation. The disposal of Staley wastes would place no capacity burden on our existing disposal system.

Compatibility Tests

Wastes are similar to those which we are already receiving from A. E. Staley in reduced quantities. They have been compatible with our plant wastes.

Adverse Effects

No adverse effects on the well integrity and injection operation are expected. We are already authorized to handle limited quantities of Staley waste. The waste will be thoroughly mixed with our HCl wastes prior to pumping to the well.

Waste Treatment at the Surface

There is no treatment planned before injection other than mixing with our existing wastes.

Staley Laboratory Report

June 23, 1977

Typical compositions of filtrates for hauling in ppm.

	ETHY 2025	ECLIPSE N	STAYSIZE 140*	STAYSIZE 11
COD	28,212	35,367	20,585	29,670
BOD	14,705	26,646	15,871	19,921
Total Solids	56,792	64,831	34,584	46,420
Salts	37,852	38,658	20,049	25,439
Sulfates	21,665	25,638	9,551	15,027
Phosphates	263	117	257	N/A
Chlorides	3,433	N/A	3,950	N/A
Suspended Solids	465	466	400	N/A
	(Ave.of 6)	(Avg.of 5)	(Avg.of 3)	(Avg.of 4)

*First Filtrate from 16

CABOT LABORATORY TEST

<u>Staley Waste</u>	<u>Organic</u> (Freon Extractable)
Ethy 2025	19.0 ppm
Eclipse N	11.2 ppm
Staysize 140	3.8 ppm
Staysize 111	13.6 ppm

6/28/77